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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/032,008	12/31/2001	Liang-Chi Huang	SUND 267	6128
7590 08/26/2004				
RABIN & CHAMPAGNE, P.C. Suite 500 1101 14th Street, N.W. Washington, DC 20005			EXAMINER NELSON, ALECIA DIANE	
			ART UNIT 2675	PAPER NUMBER 8

DATE MAILED: 08/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/032,008

**Applicant(s)**

HUANG, LIANG-CHI

**Examiner**

Alecia D. Nelson

**Art Unit**

2675

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 May 2004.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-8 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. ***Claims 1-8*** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lasneski (U.S. Patent No. 6,636,205) in view of Kawamura (U.S. Patent No. 5,859,626).

With reference to **claims 1 and 6**, Lasneski teaches a method for automatically adjusting display quality, which is used for adjusting a display (see abstract) comprising the steps of providing (bus 32A-C, 34, 36) a set of frame data (RGB analog) with a set of display timings (Hsync, Vsync) wherein the set of display timings has a display resolution (see column 5, lines 50-56); auto-phasing (PLL) the set of frame data to obtain a set of phase data (see column 9, lines 2-15); and comparing the display resolution with a set of standard resolutions (see column 8, lines 13-18), and automatically H-positioning to obtain a set of H-pos data (see column 9, lines 12-15).

While Lasneski teaches that the H-positioning data is compared with standard resolutions, there is no teachings that the H-positioning is stored when the display resolution corresponds to one of the set of standard resolutions, however it is taught that only the standard resolution entries are required, only if

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the resolution being employed by the multimedia source is unknown (see column 8, lines 40-44). Being that it is obvious for the table of standard resolutions to be stored for comparison, it would also be obvious to store the obtained horizontal positioning for a given set of frame data and display timings. Further Lasneski fails to specifically teach determining whether to perform H-positioning to display a frame corresponding to the frame data in the center of the screen of the display.

Kawamura teaches a display device that is automatically operable with various types of standards of video signals has a display panel (1), a controller (2), and a timing generator (3), wherein the display panel contains a built-in horizontal scanning circuit that is operable in response to input timing signals and distributes the various types of standards of the video signals provided from the exterior to the selected rows of the pixels, thereby displaying the image. The timing generator generates the timing signals in accordance with the adjustment information and inputs them into the display panel, whereby the image that has been optimally adjusted based on the standard of the video signal is displayed (see abstract). The horizontal scanning circuit (7) receives a horizontal clock signal and horizontal start signals and transmits the start signals in synchronization with the clock signal, thereby distributing the video signals to the selected rows formed by the pixels. The timing generator (3) exerts control over the phase of the horizontal start signal in accordance with the adjustment information, thereby enabling automatic adjustments of the horizontal center position of the picture (see column 4, lines 7-64).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to allow for a storage device for storing the standard resolutions as well as the obtained horizontal positioning data as suggested by Lasneski, in order to thereby prevent recalculation of the provided frame data and display timings when received from the data source. This would thereby reduce calculation time, which is needed to adjust the display, in turn more quickly providing adjustment information to prevent jitters and reduce degradation of the image quality.

With reference to **claims 2 and 3**, Lasneski teaches that the automatic adjusting the display of a projector (see column 5, line 31). Considering that it is well known for a projector to be of LC type, it would be obvious to allow the display to be an LCD.

With reference to **claim 4**, it is taught that the counters (82, 84, 86), which are used to calculate the H-positioning, are reset at the start of each video data scan line, thereby allowing the method for adjusting to be performed repeatedly for the incoming data stream.

With reference to **claim 5**, Table 1 lists a set of standard resolutions, which include 1024x768 (see column 8).

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With reference to **claims 7 and 8**, even though it would be obvious for the system of Lasneski to contain a memory for storing the H-pos as explained above with reference to **claim 1**, there is no specific teachings that the memory device is a Flash ROM or EEPROM. However the usage of such devices are well known in the art, as well as a microcontroller or an ASIC to contain such memory devices.

### ***Response to Arguments***

3. Applicant's arguments with respect to **claims 1-8** have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

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the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alecia D. Nelson whose telephone number is (703) 305-0143. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steve Saras can be reached on (703) 305-9720. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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August 20, 2004